

| PRODUCT NUMBER | DESCRIPTION | NOTES |
|------------------|------------------|------------|
| 10117947-XXXXLF | NON-HF | SEE SHT. 3 |
| 10117947-XXXXHLF | HALOGEN FREE (H) | SEE SHT. 3 |



| | | | | | | | | | |
|-------------|----------------|------------------------|----------------------------------|--------------|-----------|---------------|-------|----------|---|
| dr | Deborah Ingram | 2011/05/23 | projection | mm | size | A3 | scale | 1:1 | |
| eng | Tommy Lin | 2014/01/06 | | | ecn no | ELX-N-16648-1 | | | |
| chr | - | - | | | rel level | Released | | | |
| appr | Roger Cheng | 2014/01/07 | product family | MiniSAS/SATA | rev | D | | | |
| | | title | MINI SAS HD 8X TO 2 MINI SAS 2.1 | | dwg no | 10117947 | | cat. no. | - |
| www.fci.com | | Product - Customer Drw | | sheet 1 of 5 | | | | | |

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| PRODUCT NUMBER | DESCRIPTION | NOTES |
|------------------|------------------|------------|
| 10117947-XXXXLF | NON-HF | SEE SHT. 3 |
| 10117947-XXXXHLF | HALOGEN FREE (H) | SEE SHT. 3 |



END P1
MINI SAS HD 8X
ISOMETRIC VIEW



END P2 & END P3
MINI SAS
ISOMETRIC VIEW



KEY 3 & KEY SLOT 2, 4 & 6
○◇ UNIVERSAL PORT

END P2 & END P3
MINI SAS

| | | | | | | | | |
|-------------|----------------|------------|----------------|----------------------------------|--------------|---------------|-------|-----|
| dr | Deborah Ingram | 2011/05/23 | projection | mm | size | A3 | scale | 4:5 |
| eng | Tommy Lin | 2014/01/06 | | | ecn no | ELX-N-16648-1 | | |
| chr | - | - | | | rel level | Released | | |
| appr | Roger Cheng | 2014/01/07 | product family | C&A | | | | |
| | | title | | MINI SAS HD 8X TO 2 MINI SAS 2.1 | dwg no | 10117947 | rev | D |
| www.fci.com | | cat. no. | - | Product - Customer Drw | sheet 2 of 5 | | | |



| PRODUCT NUMBER | DESCRIPTION | NOTES |
|------------------|------------------|------------|
| 10117947-XXXXLF | NON-HF | SEE SHT. 3 |
| 10117947-XXXXHLF | HALOGEN FREE (H) | SEE SHT. 3 |

| PRODUCT NUMBER (NON-HALOGEN FREE) SEE NOTE 16 | AWG | "DIM L" LENGTH (Meters) | "DIM M" HEIGHT (mm) |
|---|--------|-------------------------------|---------------------------|
| 10117947-5020LF | 24 AWG | 2 M | (20.1) |
| 10117947-5030LF | 24 AWG | 3 M | (20.1) |
| 10117947-5040LF | 24 AWG | 4 M | (20.1) |
| 10117947-5050LF | 24 AWG | 5 M | (20.1) |
| 10117947-5060LF | 24 AWG | 6 M | (20.1) |
| 10117947-5070LF | 24 AWG | 7 M | (20.1) |
| 10117947-5080LF | 24 AWG | 8 M | (20.1) |
| 10117947-5090LF | 24 AWG | 9 M | (20.1) |
| 10117947-5100LF | 24 AWG | 10 M | (20.1) |
| 10117947-4020LF | 26 AWG | 2 M | (20.1) |
| 10117947-4030LF | 26 AWG | 3 M | (20.1) |
| 10117947-4040LF | 26 AWG | 4 M | (20.1) |
| 10117947-4050LF | 26 AWG | 5 M | (20.1) |
| 10117947-4060LF | 26 AWG | 6 M | (20.1) |
| 10117947-4070LF | 26 AWG | 7 M | (20.1) |
| 10117947-4080LF | 26 AWG | 8 M | (20.1) |
| 10117947-3010LF | 28 AWG | 1 M | (17.3) |
| 10117947-3020LF | 28 AWG | 2 M | (17.3) |
| 10117947-3030LF | 28 AWG | 3 M | (17.3) |
| 10117947-3040LF | 28 AWG | 4 M | (17.3) |
| 10117947-3050LF | 28 AWG | 5 M | (17.3) |
| 10117947-3060LF | 28 AWG | 6 M | (17.3) |
| 10117947-2005LF | 30 AWG | 0.5 M | (17.3) |
| 10117947-2010LF | 30 AWG | 1 M | (17.3) |
| 10117947-2020LF | 30 AWG | 2 M | (17.3) |
| 10117947-2030LF | 30 AWG | 3 M | (17.3) |
| 10117947-2040LF | 30 AWG | 4 M | (17.3) |

| PRODUCT NUMBER (HALOGEN FREE) SEE NOTE 9 AND 16 | AWG | "DIM L" LENGTH (Meters) | "DIM M" HEIGHT (mm) |
|---|--------|-------------------------------|---------------------------|
| 10117947-5020HLF | 24 AWG | 2 M | (20.1) |
| 10117947-5030HLF | 24 AWG | 3 M | (20.1) |
| 10117947-5040HLF | 24 AWG | 4 M | (20.1) |
| 10117947-5050HLF | 24 AWG | 5 M | (20.1) |
| 10117947-5060HLF | 24 AWG | 6 M | (20.1) |
| 10117947-5070HLF | 24 AWG | 7 M | (20.1) |
| 10117947-5080HLF | 24 AWG | 8 M | (20.1) |
| 10117947-5090HLF | 24 AWG | 9 M | (20.1) |
| 10117947-5100HLF | 24 AWG | 10 M | (20.1) |
| 10117947-4020HLF | 26 AWG | 2 M | (20.1) |
| 10117947-4030HLF | 26 AWG | 3 M | (20.1) |
| 10117947-4040HLF | 26 AWG | 4 M | (20.1) |
| 10117947-4045HLF | 26 AWG | 5 M | (20.1) |
| 10117947-4060HLF | 26 AWG | 6 M | (20.1) |
| 10117947-4070HLF | 26 AWG | 7 M | (20.1) |
| 10117947-4080HLF | 26 AWG | 8 M | (20.1) |
| 10117947-3010HLF | 28 AWG | 1 M | (17.3) |
| 10117947-3020HLF | 28 AWG | 2 M | (17.3) |
| 10117947-3030HLF | 28 AWG | 3 M | (17.3) |
| 10117947-3040HLF | 28 AWG | 4 M | (17.3) |
| 10117947-3050HLF | 28 AWG | 5 M | (17.3) |
| 10117947-3060HLF | 28 AWG | 6 M | (17.3) |
| 10117947-2005HLF | 30 AWG | 0.5 M | (17.3) |
| 10117947-2010HLF | 30 AWG | 1 M | (17.3) |
| 10117947-2020HLF | 30 AWG | 2 M | (17.3) |
| 10117947-2030HLF | 30 AWG | 3 M | (17.3) |
| 10117947-2040HLF | 30 AWG | 4 M | (17.3) |

| | | | | | |
|---|----------------|---|---|------------------------|---------------|
| dr | Deborah Ingram | 2011/05/23 | projection  | size A3 | scale 1:1 |
| eng | Tommy Lin | 2014/01/06 | | | |
| chr | - | - | | | |
| appr | Roger Cheng | 2014/01/07 | | | |
| product family | | | C&A | ecn no | ELX-N-16648-1 |
| rel level | | | Released | | |
|  | | title MINI SAS HD 8X TO 2 MINI SAS 2.1 TRAINED UNIVERSAL FINAL ASSEMBLY (6Gb/s) | dwg no 10117947 | rev D | |
| www.fci.com | | cat. no. | - | Product - Customer Drw | |
| | | | sheet 3 of 5 | | |



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| PRODUCT NUMBER | DESCRIPTION | NOTES |
|------------------|------------------|------------|
| 10117947-XXXXLF | NON-HF | SEE SHT. 3 |
| 10117947-XXXXHLF | HALOGEN FREE (H) | SEE SHT. 3 |



VIEW A
SCALE: 2:1



VIEW B
SCALE: 2:1

LEGEND:



HIGH-SPEED SERIAL
DIFFERENTIAL PAIRS



SIGNAL RETURN



POWER AND MANAGEMENT
INTERFACE

WIRING LIST (SEE NOTE 7)

| END P1 (B) MINI SAS HD | | CONDUCTOR # | END P2 (MINI SAS) | |
|---------------------------|------|-----------------------|----------------------|--------|
| SIGNAL | PIN# | | PIN# | SIGNAL |
| GND | A9 | PAIR 2 | B7 | GND |
| Rx 1- | A5 | | B6 | Tx 1- |
| Rx 1+ | A4 | | B5 | Tx 1+ |
| GND | A3 | PAIR 4 | B4 | GND |
| Rx 3- | A8 | | B12 | Tx 3- |
| Rx 3+ | A7 | | B11 | Tx 3+ |
| GND | A6 | | B13 | GND |
| N/C | A1 | NO THRU CONNECTION | | |
| Interrupt | A2 | | | |
| GND | B9 | PAIR 1 | | GND |
| RX 0- | B5 | | B3 | TX 0- |
| RX 0+ | B4 | | B2 | TX 0+ |
| GND | B3 | PAIR 3 | B1 | GND |
| RX 2- | B8 | | B9 | TX 2- |
| RX 2+ | B7 | | B8 | TX 2+ |
| GND | B6 | | B10 | GND |
| N/C | B1 | NO THRU CONNECTION | | |
| Mod_PRS_L (GND) | B2 | | | |
| GND | C9 | | A7 | GND |
| TX 1- | C5 | PAIR 2 | A6 | RX 1- |
| TX 1+ | C4 | | A5 | RX 1+ |
| GND | C3 | PAIR 4 | A4 | GND |
| TX 3- | C8 | | A12 | RX 3- |
| TX 3+ | C7 | | A11 | RX 3+ |
| GND | C6 | | A13 | GND |
| SCL | C1 | NO THRU CONNECTION | | |
| SDA | C2 | | | |
| GND | D9 | | | GND |
| TX 0- | D5 | PAIR 1 | A3 | RX 0- |
| TX 0+ | D4 | | A2 | RX 0+ |
| GND | D3 | PAIR 3 | A1 | GND |
| TX 2- | D8 | | A9 | RX 2- |
| TX 2+ | D7 | | A8 | RX 2+ |
| GND | D6 | | A10 | GND |
| N/C | D1 | NO THRU CONNECTION | | |
| V+3.3 for EEPROM | D2 | | | |
| SHELL | | BRAID | | SHELL |

SHIELD-----SHIELD

WIRING LIST (SEE NOTE 7)

| END P1 (A) MINI SAS HD | | CONDUCTOR # | END P3 (MINI SAS) | |
|---------------------------|------|-----------------------|----------------------|--------|
| SIGNAL | PIN# | | PIN# | SIGNAL |
| GND | A9 | PAIR 2 | B7 | GND |
| Rx 1- | A5 | | B6 | Tx 1- |
| Rx 1+ | A4 | | B5 | Tx 1+ |
| GND | A3 | PAIR 4 | B4 | GND |
| Rx 3- | A8 | | B12 | Tx 3- |
| Rx 3+ | A7 | | B11 | Tx 3+ |
| GND | A6 | | B13 | GND |
| N/C | A1 | NO THRU CONNECTION | | |
| Interrupt | A2 | | | |
| GND | B9 | PAIR 1 | | GND |
| RX 0- | B5 | | B3 | TX 0- |
| RX 0+ | B4 | | B2 | TX 0+ |
| GND | B3 | PAIR 3 | B1 | GND |
| RX 2- | B8 | | B9 | TX 2- |
| RX 2+ | B7 | | B8 | TX 2+ |
| GND | B6 | | B10 | GND |
| N/C | B1 | NO THRU CONNECTION | | |
| Mod_PRS_L (GND) | B2 | | | |
| GND | C9 | | A7 | GND |
| TX 1- | C5 | PAIR 2 | A6 | RX 1- |
| TX 1+ | C4 | | A5 | RX 1+ |
| GND | C3 | PAIR 4 | A4 | GND |
| TX 3- | C8 | | A12 | RX 3- |
| TX 3+ | C7 | | A11 | RX 3+ |
| GND | C6 | | A13 | GND |
| SCL | C1 | NO THRU CONNECTION | | |
| SDA | C2 | | | |
| GND | D9 | | | GND |
| TX 0- | D5 | PAIR 1 | A3 | RX 0- |
| TX 0+ | D4 | | A2 | RX 0+ |
| GND | D3 | PAIR 3 | A1 | GND |
| TX 2- | D8 | | A9 | RX 2- |
| TX 2+ | D7 | | A8 | RX 2+ |
| GND | D6 | | A10 | GND |
| N/C | D1 | NO THRU CONNECTION | | |
| V+3.3 for EEPROM | D2 | | | |
| SHELL | | BRAID | | SHELL |

SHIELD-----SHIELD

| | | | | | | | | |
|-------------|----------------|------------|----------------------------------|-----|--------|---------------|------------------------|----------|
| dr | Deborah Ingram | 2011/05/23 | projection | mm | size | A3 | scale | 1:2 |
| eng | Tommy Lin | 2014/01/06 | | | ecn no | ELX-N-16648-1 | rel level | Released |
| chr | - | - | | | | | | |
| appr | Roger Cheng | 2014/01/07 | product family | C&A | | | | |
| | | | MINI SAS HD 8X TO 2 MINI SAS 2.1 | | dwg no | | 10117947 | |
| www.fci.com | | | cat. no. | | - | | Product - Customer Drw | |
| | | | sheet 4 of 5 | | rev | | D | |

| PRODUCT NUMBER | DESCRIPTION | NOTES |
|------------------|------------------|------------|
| 10117947-XXXXLF | NON-HF | SEE SHT. 3 |
| 10117947-XXXXHLF | HALOGEN FREE (H) | SEE SHT. 3 |

NOTES:

- MATERIALS MINI SAS HD (END P1)
BACK SHELLS: ZINC DIE CAST/ COPPER UNDER PLATE/NICKEL OVER PLATE
PULL TAB: THERMOPLASTIC POLYMER
LATCH: STAINLESS STEEL
FERRULE: BRASS
EMI GASKETS: STAINLESS STEEL
LOCTITE
HEAT SHRINK: HIGH POLYMER
PADDLE CARD: PRINTED CIRCUIT SUBSTRATE

- MATERIALS MINI SAS (END P2 & END P3)
BACK SHELLS: ZINC DIE CAST
PULL TAB: THERMOPLASTIC POLYMER
LATCH: STAINLESS STEEL
JET MELT: POLYAMIDE POLYMER
HEAT SHRINK: POLYOLEFIN
PADDLE CARD: PRINTED CIRCUIT SUBSTRATE

- ELECTRICAL PERFORMANCE PER CURRENT REVISION: T10/SAS-2.1

- THIS PRODUCT MEETS THE RESTRICTION OF HAZARDOUS SUBSTANCES IN ELECTRICAL AND ELECTRONIC EQUIPMENT (RoHS) DIRECTIVE (2011/65/EU)

- PRODUCT SPECIFICATIONS: Mini SAS HD GS-12-651, MINI SAS 2.1 GS-12-548

- UNLESS OTHERWISE SPECIFIED ASSEMBLED LENGTH TOLERANCE IS TO BE:
"DIM L" < 1 METERS = ±25mm
"DIM L" 1 METER TO 10 METER = 2% OF "DIM L"

- LABEL DETAILS:

FCI CHINA
FCI P/N
FCI CUSTOMER DRAWING REVISION
FCI SERIAL NUMBER

FONT SHALL BE CLEARLY VISIBLE AND BLACK IN COLOR

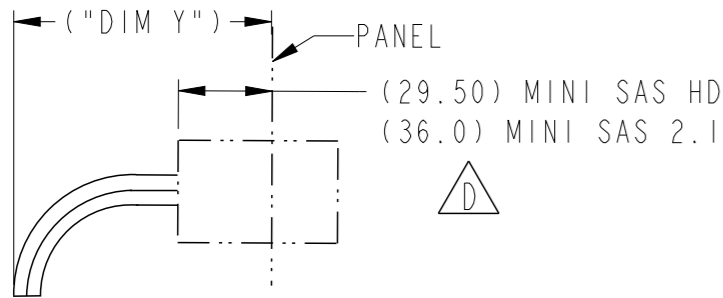
LABEL EXAMPLE

FCI CHINA
10117947-5020LF
REV.D
CN1323HG205L0001

FCI SERIAL NUMBER IS ONLY FOR TRACKING PRODUCT, DEFINED AS BELOW:



- ALL CABLE ASSEMBLIES SHALL BE 100% TESTED FOR CONTINUITY AS DEFINED IN WIRING LIST.
- PACKAGING OF LEAD FREE PRODUCTS MEETS LABELING AND PACKAGING PER SPECIFICATION GS-14-920. PACKAGE CABLE ASSEMBLIES PER GS-14-1272. DUST COVER IS TO BE APPLIED TO MINI SAS HD CONNECTOR PRIOR TO SHIPPING. FCI PACKAGE TRACKING BAG LABEL IS ONLY FOR REFERENCE.
- "H" PRODUCT NUMBERS DESIGNATE THE USE OF HALOGEN FREE RAW CABLE.
- THIS DIMENSION IS A FINISHED PRODUCT LENGTH.
- A "△" SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION. THE CURRENT REVISION WILL BE SHOWN IN THE SYMBOL.
- MEETS ELECTRICAL PERFORMANCE REQUIREMENTS OF SAS 2.1.
- MATES WITH SERIES: MINI SAS HS - 100112627 or 10112628
MINI SAS 2.1 - BOARD CONNECTOR 100988870 AND CAGE 10098872
- PLACE A CABLE TIE EVERY 0.5 METERS ON ASSEMBLIES. IN THE CASE OF A 0.5 METER CABLE LENGTH, PLACE THE CABLE TIE MIDWAY BETWEEN CONNECTORS.



PEND RADIUS
TOP VIEW OF CONNECTOR

MINI SAS HD P1
MINIMUM CABLE BEND TABLE

| CABLE | ("DIM Y") HF | ("DIM Y") NON-HF |
|--------|-----------------|---------------------|
| 24 AWG | 101.1 | 100.6 |
| 26 AWG | 100.0 | 99.7 |
| 28 AWG | 99.1 | 98.7 |
| 30 AWG | 98.5 | 97.9 |

MINI SAS 2.1 P2 & P3
MINIMUM CABLE BEND TABLE
PER CONNECTOR

| CABLE | ("DIM Y") HF | ("DIM Y") NON-HF |
|--------|-----------------|---------------------|
| 24 AWG | 90.6 | 88.3 |
| 26 AWG | 85.3 | 82.9 |
| 28 AWG | 79.3 | 76.9 |
| 30 AWG | 75.7 | 72.1 |



NOTES CONTINUED

- EEPROM INFORMATION OF MSHD SIDE REFER TO FCI LATEST PRODUCT SPEC. GS-12-651

- CABLE IS OPTIONAL, WHICH HAD BEEN QUALIFIED BY FCI AND MEET FCI PRODUCT SPEC. GS-12-651/548

| | | | | | | | | |
|--------------|----------------|------------|--|----|--------------------|----|------------------------|-----|
| dr | Deborah Ingram | 2011/05/23 | projection | mm | size | A3 | scale | 1:1 |
| eng | Tommy Lin | 2014/01/06 | | | ecn no | | | |
| chr | - | - | | | ELX-N-16648-1 | | | |
| appr | Roger Cheng | 2014/01/07 | product family | - | rel level | | | |
| www.fci.com | | | cat. no. | | - | | Product - Customer Drw | |
| | | | MINI SAS HD 8X TO 2 MINI SAS 2.1 TRAINED UNIVERSAL FINAL ASSEMBLY (6Gb/s) | | dwg no 10117947 | | rev D | |
| sheet 5 of 5 | | | - | | - | | - | |

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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